

1	GENERAL										
2	Project:	INSTALLATION OF GTC AT GANDHAR					Job No.:	B240			
3	Owner:	GAIL (INDIA) LIMITED					Site:	GOU GANDHAR			
4	Purchaser:						Unit:	NEW COMPR. AREA	Unit No.:	910	
5	Item No.:	910-CP-101					Service:	Cent. Comp. & Gas Turbine			
6	No. of Units:	One	Working:	One	Standby:	None					
7	Applicable to:	☒ Proposal ☐ Purchase ☐ As Built									
8	☒ Scope, Option & Information specified by Purchaser. ☐ Information required from and options left to vendor. Vendor to cross (:) the selected option.										
9	Driver:	Type:	Gas Turbine				Manufacturer:				
10		Nameplate Power (kW):					Service Factor:	S.No.	Tag No.:		
11	Driven Unit:	Centrifugal Compressor					Manufacturer:	Model:			
12		Serial No.:					Tag No.				
13	Coupling Type:	☒ Metallic Flex. Element (Diaphragm) ☐ Gear ☐ Quill Shaft ☐ Other:									
14	Manufacturer:					Model:			Size:	Assy. Dwg. No.:	
15											
16	☐ CONDITIONS CONSIDERED FOR COUPLING SELECTION					☐ RATINGS					
17	Conditions		Torque (kgf-m)		@ rpm	Torque (kgf-m)		@ rpm	Serv. Factor		
18	Normal					Normal					
19	Driven Rated Load					Peak					
20	Maximum Steady State					Momentary					
21	Maximum Transient					Shaft Juncture (Driving)					
22	Trip Condition					Shaft Juncture (Driven)					
23	Continuous Cyclic										
24	Other:										
25	☐ Frequency of Transients (Events/Time):					☐ Non-synchronous exciting frequency:					
26	☒ Coupling Minimum Required Service Factor, SF: 1.5 (Rem-3)					☐ Actual SF					
27	☒ Ambient Temperature (EC): (Rem-2) Maximum:					Minimum:					
28	Environment:	☐ Hyd. Chloride		☐ Hyd. Sulphide		☒ Other: Dust, Fumes & Refinery Atmosphere					
29	LUBRICATION										
30	☐ Continuous	☐ Batch	☐ Non-Lubricated		☐ Viscosity:		cP @		°C		
31	☐ Filtration Microns:				☐ Pressure (kg/cm ² g)		☐ Temp. (°C):				
32					☐ Flow (m ³ /hr)						
33	COUPLING DATA										
34	☐ Shaft Separation (including thermal growth) (mm B.S.E):										
35	@ Ambient Temp.:				@ Normal Operation:				@ Maximum Transient:		
36	☐ Motor Rotor Float (mm):				☐ Limited End Float (mm):						
37	☐ Marine Type Required				☐ Flex-Hub Type Required				☐ Electrically Insulated		
38	☐ Required Misalignment Capability:										
39	Steady State:	Angular (°):		Parallel Offset (mm):		Axial (mm):					
40	Transient:	Angular (°):		Parallel Offset (mm):		Axial (mm):					
41	☐ Maximum Allowable Misalignment:										
42	Steady State:	Angular (°):		Parallel Offset (mm):		Axial (mm):					
43	Transient:	Angular (°):		Parallel Offset (mm):		Axial (mm):					
44	☐ Component Balance		☐ Component Balance & Assembly Check Balance				☐ Component Balance with Assy. Balance				
45	☐ Residual Unbalance Check of Assembled Couplings					☐ Balance Repeatability Check					
46	☐ Max. Allowable Residual Unbalance		g-mm		Driver End:		Driven End:				
47	☐ Max. Actual Residual Unbalance		g-mm		Driver End:		Driven End:				
48	☐ Torsional Stiffness (kg-mm/Rad):										
49	☐ WR ² (kg-m ²):				Driver End:		Driven End:				
50	☐ Spacer Lateral Natural Frequency:					☐ Torque Capacity of Hub/Shaft Interface for keyless fits (kgf-m):					
51	Flexible-Element Coupling:										
52	☐ Initial Deflection (mm):				☐ Pre-Stretch		☐ Compression		☐ Max. Axial Deflection (mm):		
53	☐ Calculated Axial Natural Frequency:					☐ Test of ANF:		☐ Actual ANF:			
54	☐ Maximum Enclosure Temperature at Max. Continuous speed (°C):										
55	REMARKS:										
56	1. Coupling shall be of non-lubricated diaphragm type/SS flexible membrane type with spacer.										
57	2. Refer site & Utility Data enclosed elsewhere.										
58	3. Service factor shall be over the driver rating. However, coupling service factor shall not be higher than Gear-unit service factor.										
59	4. This datasheet shall be used in case the compressor is directly driven by Gas Turbine.										
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61											
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63	MATERIALS		
64	Component	Drive End Materials	Driven End Materials
65	Hub / Flange		
66	Spacer		
67	Sleeve		
68	Flexible-Element		
69	Flexible-Element Guard		
70	Bolts		
71	Nuts		
72	☒ Protective Coating:	☒ Vendor Standard	☐ Other:
73	☐ Internal Teeth Hardness: Rockwell C	Drive End Actual:	Driven End Actual:
74	☐ External Teeth Hardness: Rockwell C	Drive End Actual:	Driven End Actual:
75	COUPLING HUB MACHINING		
76		Drive End	Driven End
77	☐ Type (Integral / Cylindrical / Taper)		
78	☒ Keyed or Hydraulically Fitted		
79	☐ Taper		
80	☐ Keyway Dimensions and Number		
81	☐ Nominal Bore Diameter (mm)		
82	☐ Interference Fit (mm): Max. Min.		
83	☒ Puller Holes		
84	☒ Trim Balance Holes		
85	COUPLING GUARD		
86	☒ Co-ordinator: Compressor Vendor	☐ Purge Gas:	☐ Dry Air Purge:
87	☒ Flanged Cylindrical:	☐ Base Mount:	☐ Purge Connection Size & Type:
88	☐ Air Tight:	☐ Oil Tight:	☐ Purge m ³ /hr Required:
89	☒ Spark Resistant	☐ Oil Mist Cooling	☐ Gas Cooling
90	☐ Transparent Window for Each Oil Spray Point:	☒ Contract Guard to be used during Shop Test	
91	☐ Vent Connection:	☐ Additional Guard Details:	
92	☐ 1 inch NPT with Filter Breather		
93	☐ 1 inch Flanged, Rating & Facing:		
94	ACCESSORIES		
95	☒ Prime Eqpt. supplier to furnish one set of Plug & Ring Gauges (Appe. D)	☒ Hydraulic Installation/Removal Tooling (To include Hand	
96	☐ Lapping Tools	Pump(s), Pressure Gauge(s), Fittings & Hose(s)) By:	
97	☐ Drill Template for Internal Flanged Hubs by:	☒ Coupling Manufacturer	☐ Purchaser
98	☐ Coupling Manufacturer	☐ Purchaser	☒ Puller By Coupling Manufacturer
99	☐ Two-Piece Stop Rings by Coupling Manufacturer	☐ Moment Simulator	☐ Solo Plate
100	APPLICABLE SPECIFICATIONS		PREPARATION FOR SHIPMENT
101	☒ API Std. 671 3 rd edition, October 1998		☒ Outdoor Storage for more than 12 months
102	☒ Others: Special Purpose Couplings, 3rd edition		☐ Expected Storage Time (Months):
103	☐	☒ Shipping	☐ Domestic ☒ Storage ☐ Indoor
104	☐ Coordination Meeting Attendance Required	☒ Export	☒ Outdoor
105	REMARKS:		
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16.04.2019	A	AS	NK
Date	Rev	Job Engineer	Rev. & Approved By